In the Response of October 14, 2005, Applicants argued that the cited combination of references fails to teach or suggest a photosensitive organic material having a first thickness in a reflection region, a second thickness in a contact-hole area, and a third thickness in a terminal section, where the first, second, and third thicknesses are different from each other. Applicants also asserted that the cited references fail to teach or suggest exposing a photosensitive layer at a first exposure value in the reflection region, at a second exposure value in the contact-hole area, and at a third exposure value in the terminal section.

Regarding these arguments the Examiner refers to Figure 7F of Sawayama. Figure 7A through 7I of Sawayama illustrate forming unevenness on an interlayer insulator 29. These figures illustrate that a first photosensitive resin 24 is applied to a glass substrate and is exposed through a mask 25, and developed. A second photosensitive resin 28 is applied over the first resin and is then exposed through a second mask 27 to form a contact hole through both the first and second photosensitive resin layers. Though the Examiner's explanation is limited and inaccurate (e.g. referring again to elements 24 and 29a in Figure 22, which do not exist), it appears that the Examiner is alleging that the combination of the first and second resin layers of Sawayama, together forming the interlayer insulator 29, also together teach the photosensitive organic material layer, as recited in claim 3.

Applicants submit that there is no teaching or suggestion of the interlayer insulator 29 (the first and second resin layers 24 and 28 taken together) having a third thickness in an area of a terminal, as recited. The Examiner fails to specifically point to a teaching or suggestion in Sawayama of first or second resin layers being applied in a terminal region. The Examiner also

acknowledges that Sawayama fails to teach this limitation ("it is noted that even if Sawayama does not disclose the various thicknesses, particularly in the terminal region..." Office Action, p. 6).

The Examiner refers to Shimada col. 5, lines 50-57 and to Figure 4C in asserting that Shimada teaches using first, second, and third exposure values to create first, second, and third thicknesses of a resin layer in a reflection region, a contact-hole area, and a terminal section, as claimed. However, Figure 4C does not illustrate a terminal region. Rather, the terminal region is more clearly illustrated in Figures 20A-20F. Col. 28, lines 33-37 describe that after the electrode 42 and the terminal 50a are formed, "an insulating film ... is deposited on the entire surface of the glass substrate 41 by plasma CVD." This film is then patterned. It is unclear whether the insulating film is formed over the entire substrate in the display region or over the entire substrate in both the display region and the terminal region. However, even if the insulating film is formed over both the display region and the terminal region, as illustrated in Figures 20A-20F, *it is entirely removed in the terminal region*. Therefore, the resultant thickness in the terminal region is the same as that in the contact hole region: zero. Therefore, like Sawayama, Shimada fails to teach or suggest either three different thicknesses of a photosensitive organic material layer in a reflection region, a contact-hole area, and a terminal section or exposing a photosensitive organic material layer at three different exposures in a reflection region, a contact-hole area, and a terminal section, as recited.

Furthermore, Applicants submit that it would not have been obvious to one of skill in the art at the time of the invention to create a photosensitive organic material layer of a different thickness in a terminal section, or to expose such a layer at a different exposure, as claimed.

As discussed in the Background section of the present Application, in the prior art, the exposure values for a reflection region 222a and a transmission region 222b of a display section 222 of a photosensitive organic material layer 210 have been considered and optimized. (See Fig. 2). However, the relationship between the exposure value for the display section 222 and the exposure value for the terminal section 223 had not been considered. The exposure value for the transmission region 222b or the exposure value for the contact-hole areas of the display section 222 had been set to be equal to the exposure value for the terminal section 223 of the layer 210.

The photosensitive organic material layer 210 is made to be thick, and therefore, the surface of the layer 210 is flat, as shown in Fig. 1B. Therefore, prior to exposure, there is a considerable thickness difference in the display section 222 and the terminal section 223. In the prior art, considering this thickness difference, the exposure value for the transmission region 222b or the exposure value for the display section 222 is set to be equal to the exposure value for the terminal section 223 of the layer 210. This is to ensure that the layer 210 is the termination section 223, is completely removed.

Therefore, the layer 210 is likely to be overexposed in the transmission region 222b or the contact hole area of the display section 222. This is because the thickness of the layer 210 in the transmission region 222b or the contact hole are of the display section 222 is smaller than the thickness of the layer 210 in the terminal section. As a result, some defects, such as "stage image

transfer" and/or "mask image reflection" may occur. These defects were discovered by the present inventors and the presently-claimed invention was created to eliminate these defects.

Therefore, Applicants submit that one of ordinary skill in the art at the time of the invention would not have been motivated to conceive of the idea of differentiating the exposure values for the reflection region 222a of the display section 222, the contact hole area or the transmission region 222b of the display section 222, and the terminal section 223, as recited in claim 3.

As shown in claim 3, an exemplary feature of the present invention is that the exposure values for the display section 22 (i.e. the reflection region 22a and the transmission region 22b) and the terminal section 23 of the photosensitive organic resin layer 10 are simultaneously optimized, as shown in Figs. 4A-4C, for example.

In other words, in the invention as recited in claim 3, the exposure step is carried out in such a way that the photosensitive organic material layer 10 in the reflection region 22a is exposed at a first exposure value EX3; the photosensitive organic material layer 10 in the contact hole area is exposed at a second exposure value EX2; and the photosensitive organic material layer 10 in the terminal section 23 is exposed at a third exposure value EX1.

The value EX1, which is the largest, is determined to remove the entire thickness of the layer 10 in the terminal section 23. The value EX2, which is in the middle, is determined to remove the entire thickness of the layer 10 in the contact-hole area of the display section 22. The value EX3, which is the smallest, is determined to partially remove the thickness of the layer 10 in the reflection region 22a of the display section 22.

In this way, in the present invention as recited in claim 3, the exposure values EX1, EX2, and EX3 are optimized for the respective regions, thereby eliminating the above-described defects, such as "stage image transfer" and/or "mask image reflection."

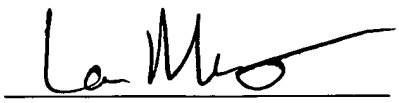
Therefore, in view of the above, Applicants submit that claims 3-7 are patentable over the cited combination of references and respectfully request that the rejection of claims 3-7 be reconsidered and withdrawn.

Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned attorney at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



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